



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/074,765	02/12/2002	Ashish Banerji	PD-201157	9961

7590

01/31/2006

Hughes Electronics Corporation
Patent Docket Administration
Bldg. 1, Mail Stop A109
P.O. Box 956
El Segundo, CA 90245-0956

EXAMINER

VO, TUNG T

ART UNIT

PAPER NUMBER

2613

DATE MAILED: 01/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/074,765

Applicant(s)

BANERJI ET AL.

Examiner

Tung Vo

Art Unit

2613

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1-3, 5, 7, 12, 14, and 16-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Gonzales (US 5,414,469) as set forth in the previous Office Action dated 09/14/2005.

Art Unit: 2613

3. Claims 1-3, 11-14, and 16-23 are rejected under 35 U.S.C. 102(e) as being anticipated by Wu et al. (US 6,700,933) as set forth in the previous Office Action dated 09/14/2005.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 4 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wu et al. (US 6,700,933) in view of Carnahan (US 5,414,780) as set forth in the previous Office Action dated 09/14/2005.

6. Claims 6, 7, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wu et al. (US 6,700,933) in view of to claim 1 and in view of Kato et al. (US 5,719,986) as set forth in the previous Office Action dated 09/14/2005.

7. Claims 8 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wu et al. (US 6,700,933) in view of to claim 1, and further in view of Weinberger et al (US 5,680,129) as set forth in the previous Office Action dated 09/14/2005.

Art Unit: 2613

8. Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wu et al. (US 6,700,933) in view of to claim 1 and in view of Moroney et al. (US 5,771,239) as set forth in the previous Office Action dated 09/14/2005.

9. Claims 15 and 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wu et al. (US 6,700,933) as applied to claims 1 and 14, and in view of Chujoh et al. (US 6,317,461) as set forth in the previous Office Action dated 09/14/2005.

Response to Arguments

10. Applicant's arguments filed 07/14/2005 have been fully considered but they are not persuasive.

Note the specification of the present invention discloses "I-frames exploit spatial redundancy *only using a transform coding such as DCT*" [005], "The reference to MPEG-4 is meant *only to* provide a thorough understanding of the present invention" [0021]; "whose effectiveness *only kicks* at very large data sizes"[0038], "By contrast, Lempel-Ziv type algorithms only capture string-matching redundancy, while pure arithmetic algorithms such as Huffman coding *only* capture statistical redundancy"[0039]; "The computer system 600 further includes a read *only memory* (ROM) 607 or other static storage device coupled to the bus 601 for storing static information and instructions for the processor 603." [0047]; and the step 101 of fig. 1

**101: COLLECT NON-INTRA FRAMES
BETWEEN CONSECUTIVE I-FRAMES
INTO I-FRAME DISTANCE SETS**

Art Unit: 2613

However, the specification of the present invention does not disclose the phrase **“only between consecutive I-frames”**.

The applicant argued that Gonzeles does not particularly discloses grouping “video frames that are only between consecutive I-frames”, and “ splitting the video data set consisting of non-intra frames” pages 6-7 of the remarks.

The examiner respectfully disagrees with the applicant. It is submitted that that Gonzales discloses a video compression system for carrying out a method, wherein the video compression system comprises a plurality of data sequences (GOP n and GOP n+1 of fig. 1), wherein grouping video frames that are between consecutive I-frames (col. 3, lines 43-44, Note each group GOP must start with an I-picture (frame) and additional I-pictures (frames) can appear within the GOP, see figure 5; wherein N= DISTANCE BEWTEEN I-FRAMES, M= DISTANCE BETWEEN P-FRAMES, wherein P-FRAMES are only between I-FRAMES) into a video data set as a plurality of data sequences (GOP n and GOP n+1 of fig. 1); splitting the video set consisting of non-intra frames (P-frames of fig. 5; see MPEP 803.02[R-3] * Markush Claims); the input signal (P-frame as determined by Motion estimation and motion compensation (Motion Estimation and MCP of fig. 12b) is split into homogeneous files (fig. 7). In view of the discussion above, Gonzales anticipates the claimed features.

The applicant further argued that Wu does not teach the feature “ grouping video frames that are only between consecutive I-frame”, and “ video data set consisting of non-intra video frames” , pages 7-9.

The examiner respectfully disagrees with that applicant. It is submitted that MPEG standard is already grouping the video stream into GOP; wherein GOP includes P

Art Unit: 2613

and B frames are only between consecutive I-frames as suggested by Wu (Col. 1, lines 35-38 and step 154 of fig. 8); wherein the GOP consists of B and P frames as non-intra frames as verified in the step 154 of figure 8. In view of discussion above, Wu anticipates the claimed features.

Conclusion

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tung Vo whose telephone number is 571-272-7340. The examiner can normally be reached on Monday-Friday.

Art Unit: 2613

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehrdad Dastouri can be reached on 571-272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Tung Vo
Primary Examiner
Art Unit 2613